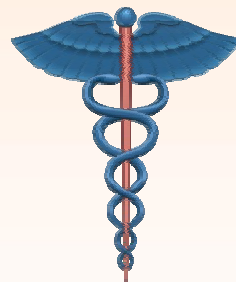


Report on the Proceedings of the Pre-Conference and Medical Breakout Sessions

2000 CSEPP National Conference



**Little Rock, Arkansas
July 18 - 20, 2000**

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CSEPP NATIONAL CONFERENCE MEDICAL BREAKOUT SESSIONS

JULY 18 – 20, 2000

REPORT ON THE PROCEEDINGS

1. BACKGROUND

The Department of the Army is directed under Public Law 99-145 to destroy the aging chemical weapons stockpile located at eight installations in the continental United States and at Johnston Atoll in the western Pacific. One of the requirements associated with the destruction process is to ensure that the communities surrounding the installations have an emergency medical response capability in the event of an accidental release of the chemical agents. The Chemical Stockpile Emergency Preparedness Program (CSEPP) evolved, in part, out of this medical need and the need to enhance overall emergency response capability in the civilian communities and at the Army installations.

In an October 1993 memorandum, the Army outlined the process to be followed by the CSEPP states to assess their current medical capability and develop plans for the necessary improvements. Each year since then, a general meeting of all the involved participants has been held to clarify the process, provide new information, exchange ideas and identify future actions. This year's conference was organized differently. It was divided into four components within CSEPP: the planning group, the exercise and training group, the public assistance group and the medical group. Each group conducted breakout sessions during the second and third days of the conference.

2. GENERAL

A total of 124 personnel, over a three-day span, attended the CSEPP medical breakout pre-conference and conference sessions, held at the Excelsior Hotel in Little Rock, Arkansas, July 18, 19 and 20, 2000. The attendees included medical personnel involved in all phases of CSEPP planning, training and responding, as well as emergency managers and other non-medical personnel with similar interests.

In the months prior to the conference, the ten CSEPP states completed three pre-conference questionnaires to develop topics to address in the medical breakout sessions. After much research and planning, the states agreed upon a prioritized list of issues to address. For each of the four top issues, representatives from two different CSEPP states gave presentations on their views of particular medical concerns or issues facing their communities. After the presentations, attendees were encouraged to identify best practices in each subject area and to discuss approaches that might be taken to develop performance measures. To assist in this process, a panel of subject matter experts and facilitators were present for each session to serve as a resource for more in-depth perspectives on the issues, and to keep the session moving forward.

Comments collected from the participants' evaluation forms indicate that the new format for the medical breakout sessions was well received.

This report is intended to document the issues discussed at each of the medical breakout sessions.

PRE-CONFERENCE

3. INTRODUCTORY REMARKS

LTC(P) DAVID MUKAI AND MR. KENNETH HUDSON

LTC(P) DAVID MUKAI, MC

LTC Mukai began by welcoming everyone to the pre-conference and conference medical breakout sessions. He described the purpose of the CSEPP National Conference 2000 Medical Breakout Sessions. He explained that there were many issues the CSEPP participants had wanted to address, but were not covered completely at the previous conferences. LTC Mukai noted that the forum for the medical breakout sessions would be that of an interactive workshop. His intent was to offer an open atmosphere for presentation of CSEPP medical community issues. LTC Mukai hoped that an open workshop activity would allow each community to investigate and discuss their specific issues. He believed that this interaction would foster synergism of medical knowledge among participants, thereby increasing the resources available for answering questions. LTC Mukai stressed that the success of the workshop depended upon the level of interaction among participants.

MR. KENNETH HUDSON

Mr. Hudson gave a warm welcome to the participants and described the layout of the medical breakout session's intended program of activities. The first day was to consist of meetings of the CSEPP medical coordinators, FEMA regional representatives and emergency management personnel with medically related roles and responsibilities. There would be a presentation on the government perspective of performance measures and a presentation on the Hospital Emergency Incident Command System (HEICS). An opportunity would also be provided to discuss the other six topics requested by the participants during the pre-conference survey. Breakout sessions on the following two days would address the four major medical topics identified in the pre-conference questionnaires. For each topic, there would be two presentations from representatives of the CSEPP community. Following the presentations, a panel consisting of two presenters, a subject matter expert and a facilitator, would be available to assist in the discussion of the topic and to attempt to arrive at a best practice solution for each topic. Mr. Hudson stated this would be the point of departure for the next year of activity within the CSEPP community. The 2001 CSEPP National Conference would build upon the outcome of the current conference.

Mr. Hudson continued by confirming that accreditation/continuing education credits would be awarded for attendance at the medical breakout sessions. Finally, he prepared the participants for

the introduction of a performance measure program that the government expected the CSEPP community to develop for themselves.

4. PERFORMANCE MEASURES MR. LARRY SKELLY

Mr. Skelly of the Office of the Assistant Secretary of the Army for Installations and Environment gave a brief presentation on the requirement for establishing performance measures. The Clinton administration has directed Congress to enact this requirement for all federal agencies. Congress mandates a performance measurement program for federal agencies through the *Government Performance and Results Act* (GPRA). This regulation requires federal agencies to develop strategic and performance plans, and to report on program performance to Congress. In order to comply with this last requirement, CSEPP must collect data from the state and local levels. Currently CSEPP has no established standards to measure performance. Establishment of a set of national standards will maximize protection to the public and the environment, while ensuring that chemical storage and demilitarization facilities operate safely, effectively, and efficiently. These standards will ensure compliance with the GPRA and ensure continued federal funding of the CSEPP program. It is envisioned that the CSEPP Performance Measurement System will integrate exercises, self-assessment, and quantitative indicators. CSEPP communities were encouraged to develop performance measures that address specific needs or concerns and determine what is acceptable for their community.

Guidance for Fiscal Year 2001 will be released by September 1, 2000. The first report is expected as early as January 31, 2001. The challenge over the next year will be to develop a structure for integrating performance measures, where applicable, into priority topic areas in CSEPP.

5. APPROACH TO ESTABLISHING PERFORMANCE MEASURES MS. DEBBIE KIM (UT) AND MS. SHARON WILCOXSON (CO)

Ms. Kim and Ms. Wilcoxson presented "FOCUS PDCA" as a practical approach to establish and measure performance:

- F** Find a process to improve.
- O** Organize an improvement effort.
- C** Clarify.
- U** Understand variation.
- S** Select.
- P** Plan realistically.
- D** Do it.
- C** Check it.
- A** Adjust to the changes.

FOCUS PDCA communicates a new way of implementing performance measures and provides a practical application of implementing performance measures into a health-based, process improvement paradigm. The presenters' overall view of the concept was “one performance improvement technique.”

The two presenters explained the FOCUS PDCA approach using decontamination at a hospital as an example. The presenters' step-by-step explanation gave the participants a concrete example for developing performance measures for hospital-based decontamination. The audience appreciated the concept, and reference was made to it in the comment section of the course evaluations.

According to the presenters, the “key to the whole process is an administrative person who will support the changes financially, allowing the implementation to physically happen.” If able to secure administrative support, the presenters claimed the process will evolve and improve. They suggested trying to convince the administrator that supporting and implementing the new changes would result in income for the facility and provide good publicity. This might then increase the community’s favorable impressions of the hospital and increase the patient visits. They stressed selling the theories of higher revenue or lower costs to the administrator.

The questions and comments posed by the audience were as follows:

Audience Comment: A hospital administrator commented that they “primarily look at flow charts for the concept of time and patient processing. When speaking with an administrator, use that process [flow charts] for demonstration of the focal point. Show the savings of patient processing time in the improvement process and it will get the administrator’s attention. Patient care must not be compromised during the transition period.”

Question: How can a team leader make more improvements with fewer resources?

Answer: Reorganize or reissue the job descriptions and cross-train employees to perform multiple duties when the need occurs.

Audience Comment: “That was an excellent presentation. It leads us to think about forming an IPT [Integrated Product/Process Team] to look into issues further, to allow development of performance measures. Keep records of all changes and document everything.”

Audience Comment: “A major concern I have is that the CSEPP program is being compared to the business model of evaluating their product and services. Intel and IBM do not just evaluate the people in the warehouse, they also evaluate the VP and the CEO via the board. I am concerned that we don’t have a way to evaluate and have any mechanism to have performance measures for the support that we (as emergency responders) get from our state EMs [emergency management], FEMA Regions, FEMA headquarters, DA [Department of the Army], SBCCOM [U.S. Army Soldier and Biological Chemical Command] and all the other players. Example: If I say I need a widget, and someone above me says, ‘I don’t think you do,’ but then they ding me because I don’t have a widget on the street, how can I input that into my performance measures as a way that has to be followed? If we get to the process of doing performance measures, we need to be made sure that we also address a means to check the management above us to ensure that they also have to show what they are doing to be beneficial to us.”

Audience Response: “Generally when that is done, it’s a failure because things get pushed down in management, things do not get pushed up. We can not make them be accountable. No matter what we do, if the leader doesn’t sign off on it, you can’t make him. It’s a double standard.”

6. THE NOBLE TRAINING CENTER

CPT JOHN D. HOYLE, SR.

CPT Hoyle provided an overview of the Noble Training Center facility to include its history, and current and future operations. The Noble Training Center’s purpose is to create, train, and evaluate the medical response to acts of terrorism. During 1999, the Department of Health and Human Services took control of the closed Noble Army Hospital at Fort McClellan, Alabama. The goal is to provide a mock hospital training environment for civilian healthcare and Emergency Medical Service (EMS) personnel and to address the need for training in response to a weapons of mass destruction (WMD) incident. There are two courses currently projected for trial. The first is for EMS personnel, focusing on response to WMD incidents with injuries, to include nuclear, biological, chemical, and high yield explosives. A pilot class is slated for October 2000. The second course is for hospital personnel, including physicians, hospital administrators, nurse executives, hospital engineers, and others. There is a crucial need for involvement of either the hospital administrator or the chief nurse. Without their participation, “nothing will get done, simply because they sign the checks.” This course is designed to bring all the hospital personnel together to act as a team, and to understand each other's roles. The course will not only cover the injuries associated with a WMD incident, but will also show hospital

personnel how to protect themselves with personal protective equipment (PPE), and how to protect the hospital from becoming contaminated.

Currently, the Noble Training Center has addressed funding issues by covering all costs of the training, including airfare and transportation, lodging and meals, and student instruction. There are other medical personnel who could benefit from this training, but the funding is currently set aside only for those who will benefit the most. If more funding should become available, then others could attend.

A course in “home-grown” and “agricultural” terrorism is being developed. [Slides of the facility were shown and a description of each was given.] This state of the art facility will also conduct beta testing and applied research on new innovations for the medical sector of homeland defense.

Question: Can the training be done at hospitals?

Answer: No, the opportunity to get people away from the hospital should provide a very worthwhile experience, and have everyone “on the same sheet of music.” It would only cost the hospital the employees' time to allow the employee to attend the training. The switching of roles would allow the administrator to understand what the nurses and physicians would face. The physicians and nurses would understand the issues of building protection that the engineers face. The goal is to get everyone to work as a team and return to their facility to effectively carry out a plan. This can only be accomplished by taking them out of their traditional roles.

Question: What should the EMS participants expect to see at the course?

Answer: The EMS course will focus on subjects specific to the EMS community, such as how to treat injuries from nuclear, biological, chemical, and high yield explosives, and how to treat blast and crush injuries. They will learn, appropriate to their skill level, how to protect themselves in PPE, and they will get an introduction to hospital, law enforcement, and public health issues involved in a terrorist event. Because effects from chemical attacks manifest in the field, very quickly after exposure, EMS will be involved in initial treatment and transportation to hospitals. In contrast, EMS will play a much lesser role in biological attacks, which usually become apparent at hospitals several days after exposure.

7. DISCUSSION OF SUBJECT AREAS

MR. KENNETH HUDSON

Mr. Hudson described how the subject areas for discussion at the national conference were developed. The first survey of the CSEPP states was conducted to elicit their opinions as to which specific topics to discuss. The initial survey identified 41 topics of discussion, which were later grouped into ten categories. The second survey asked the ten states to prioritize those categories. The results of that prioritization are listed below, with highest priorities at the top.

Decontamination

Triage Protocols
Toxicological Treatment
Administrative Support and Stakeholders
Training and Exercises
CSEPP vs. Other Programs
Developing Integrated Plans
Program Lessons Learned
Budget and Resources
Reentry and Recovery

A third survey asked, “If offered continuing education credits, would the conference attendance increase?” The overwhelming response was that it would. Each state was asked to recommend a speaker to discuss their perspective on one of the top four categories listed above. The speakers were to develop presentations that could be submitted to accrediting agencies so that continuing education credits could be issued. The areas that were accredited were Decontamination, Triage Protocols, Toxicological Treatments, and HEICS.

The topic of Administrative Support and Stakeholders sparked significant interest, so it was added to the discussion subjects, but did not meet the preexisting learning objectives in place with the accreditation agencies for medical education. Unfortunately, because of time constraints, the other six topics (see below) could not be addressed as separate panel discussions.

Training and Exercises
CSEPP vs. Other Programs
Developing Integrated Plans
Program Lessons Learned
Budget and Resources
Re-entry and Recovery

These topics were discussed Tuesday afternoon as part of the pre-conference instead.

Training and Exercises (Questions or comments on the survey that were posed by the states)

Survey Comment: Identify who is responsible for training and exercising of medical activities.

Audience Response: No response/comment from the audience.

Survey Comment: Conduct exercises that stress the medical system, thus assuring system preparedness.

Audience Response: One challenge faced is unrealistic scenarios that do not stress daily operations and thus do not allow a legitimate balance with real patient care. An unannounced, sudden influx of 40 patients would surely stress the healthcare delivery system. It would call for additional administrative staff, ancillary physicians and other staff, interfacility transfers, and facility shutdowns. There would have to be a high level

of competence in the staff to ensure successful operations. If that part of the system were examined, many hospitals would be impacted significantly. Example: One CSEPP coordinator staged an event that exercised four hospitals simultaneously. On the surface, this event seemed very stressful, but did it really stress daily operations? The answer is not truly known. The unknown presents the biggest challenge for our hospitals.

Audience Comment: Again, the unknown presents the biggest challenge for a medical system. Another challenge we face is not being able to get anyone else to play. What may happen during a real event, because of this, is unknown. Lastly, the "real" or normal patients are forgotten.

Suggestion to rectify/correct the issues/situations: Bring in off-duty people and back-up apparatuses, to allow on-duty personnel to participate in the exercise while not overlooking their daily duties. This theory was utilized successfully during a CSEPP exercise. During the actual exercise, there was a working house fire. It stressed the emergency response system resources, but the daily duties were not overlooked, and participation occurred in both events. The end result was generation of an overtime budget. That is something to plan for when providing an emergency service such as paramedic support. It has to be part of the overall planning process.

Another hospital has started a practice using a "box drill." It involves sending a box around the hospital and having each department fill it with supplies. (These supplies are the amount that would be used during an exercise.) The purpose is to see if there are enough supplies added to the box, and if this can be done without overstressing the system's resources during normal operations. It is hoped that new insight will be gained from this experience.

Facilitator Comment: Does everyone understand the concept of a community exercise planning committee?

Audience Response: It includes all agencies in the planning process, thus making everyone a participant. The theory is that this encourages more participation from the agencies.

Question: How many of you have medical representatives in your emergency operations center at the local and state levels?

Answer: [Most of the states involved raised their hands.]

Audience Comment: Train *before* the exercise, so as to allow an exercise to occur, as opposed to training *during* the exercise.

Audience Comment: The emergency responders are not interested when offered CSEPP training. The common response is a negative one, simply because of the repetitive nature, and lack of "fun." In response, one CSEPP community has combined mass casualty training drills with the CSEPP concepts, thus allowing each group to

practice their skills and maintain interest in the common goal. The exercise would include a chemical agent mass casualty scenario, hence a “CSEPP Exercise.” It keeps the interest of the responders, which is very important in soliciting participation in the exercises.

Survey Comment: Discuss exercise lessons learned on communications.

Audience Comment: The main point of that comment was regarding the lessons learned issues. It raises the question of how to share the lessons learned. Should a community establish a formal notification process? One community has a newsletter to keep all those involved and the public notified of the happenings in that CSEPP community.

Audience Comment: During a non-CSEPP related event, an emergency management worker inadvertently pressed the CSEPP community notification button, setting off a general “CSEPP ALERT.” Sirens sounded, signs lit up, and all the responders were called in. Because of this action, many unexpected issues surfaced and a process of change had to be implemented. Example: An electronic sign on the freeway read “EXTREME CHEMICAL HAZARD EVENT. EXIT IMMEDIATELY” and not one car exited. The lesson learned is to send police cars to that particular place to physically block the road, thus preventing the same problem. Some credibility of the CSEPP was lost, but it ultimately revealed some problems in the response procedures. These have been addressed and corrected because of the ‘unplanned exercise’.

8. HOSPITAL EMERGENCY INCIDENT COMMAND SYSTEM MR. DENNIS HUDSON (AR)

Mr. Hudson gave a presentation on the Hospital Emergency Incident Command System (HEICS) that his hospital uses. He first described the history of the current system. He then listed the top ten weaknesses in most emergency plans and highlighted the problems specific to a hospital environment. The basis for creating a flawless incident command system was reviewed. Planning, implementation and personnel involvement was described.

QUESTION: Is the business experience of the CEO, president or senior vice president enough experience to allow that person to take the role of the incident commander?

ANSWER: No, it is not. If the system has the resources to remove that person from the incident system, then it should be done. However, many smaller hospitals are strapped for resources and must utilize every asset. In that case, the person should be given a different role within their general capabilities. (It is important to have a trained and experienced incident commander at the helm to ensure smooth coordination among the agencies involved.)

9. DISCUSSION OF SUBJECT AREAS (Continued)

MR. KENNETH HUDSON

[The audience continued the discussion of Training and Exercises.]

Survey Comment: Expand chemical agent training at hospitals by discussing ways to familiarize hospital departments, beyond the Emergency Department, with the signs and symptoms of a chemical agent exposure and basic treatment protocols. Discuss proper education and emergency response at civilian hospitals per Department of Defense and national guidelines.

Audience Comment: Most personnel outside of the Emergency Department are neither comfortable nor capable of recognizing or treating the signs or symptoms of a chemical exposure. This instance was noted after an exercise had occurred. As a minimum, every healthcare provider in the hospital should know how to recognize the signs and symptoms of nerve or vesicant agent exposure.

Survey Comment: Discuss the need for standard EMS Training for all EMS agencies. It is crucial that each EMS response agency that would evaluate and treat patients be provided with the same criteria for treating and assessing those patients.

Audience Comment: Not all EMS agencies train the same way or treat the same patient in the identical manner. Some agencies don't trust the other involved agencies, and some things are repeated unnecessarily. There is a need for a common practice or joint training.

Audience Comment: One CSEPP community trained together and they now have the same knowledge base. They each trust that the other has correctly decontaminated or treated a patient.

Survey Comment: Incorporate veterinary and agricultural concerns into the CSEPP program.

Audience Comment: There are several overlooked issues: What should people do with their livestock? What should people do with their pets and produce? What needs to be destroyed? What can still remain? Is the produce/crop still good, or should it be discarded? Can it be decontaminated? These issues need to be addressed during a recovery/planning meeting.

Audience Comment: During many major disasters, the poison control centers are called upon to answer these questions; therefore, when the planning is completed, please remember to include the poison control center in the distribution of answers to these questions.

Audience Comment: Utilize the local or state health department for these answers.

Audience Comment: In one CSEPP community, the Animal Control Department has set up an animal decontamination line in conjunction with the human decontamination line. Whenever the HAZMAT team is called to a scene, the animal control agency is also called. The system worked very well at the last full-scale exercise, and it will continue to be used in the future.

Audience Comment: The livestock is rounded up and placed at the local fairgrounds until a later time.

CSEPP vs. Other Programs (Questions or comments on the survey, posed by the states)

Survey Comment: Demonstrate the cross-linking between CSEPP and the WMD program. Describe how antidotes and equipment are utilized in both programs. This has win-win potential.

Audience Comment: There are many groups that train for non-chemical warfare events. When there is a terrorist attack with an agent, this would fall in the realm of the WMD program, but our (the CSEPP participants) knowledge will be tapped because “we deal with it the most.” If needed, the two programs can work side by side.

Developing Integrated Plans (Questions or comments on the survey, posed by the states)

Survey Comment: Develop corresponding plans for CSEPP and hospitals, synchronization of issues between county EMS and hospitals, and coordination between the hospitals and the first responders.

Audience Comment: These issues were covered this morning under the training topic.

Audience Comment: Medical plans should also be coordinated with state plans. The plan should cover issues such as the air space restriction, so nothing will be flying overhead.

Program Lessons Learned (Questions or Comments on the survey, posed by the states)

Survey Comment: Discuss the medical concept of operations used in CSEPP states and other states involved in emergency preparedness. What medical scenarios or problems have states overcome, and how did they do it?

Audience Response: [There was no response from the audience.]

CONFERENCE

10. DECONTAMINATION

MR. STEVE MYREN (OR) AND MR. LLOYD BAKER (UT)

MR. STEVE MYREN

Mr. Myren gave a presentation on how his community uses decontaminants, how efficient they are, and the potential adverse health effects associated with the use of such decontaminants. He described the concepts behind pre-hospital decontamination systems and which types of portable equipment would be best for his system. He showed pictures of his system's equipment and described how each had come to be the best equipment for his system. He cautioned that his system may not work for others. He then noted the problems that his community had incurred and the solutions that were instituted.

Problem: Stretcher and backboard patients do not fit into the mobile decontamination trailers.

Solution: Decontamination of non-ambulatory patients will be completed along the outside of the decontamination trailer.

Problem: Some written pre-plans for decontamination equipment were unrealistic when used in an exercise.

Solution: Testing of all pre-plans needs to be conducted *before* the plans are adopted to ensure that they are realistic.

Problem: Local law enforcement could not perform the requirements of their job while wearing PPE.

Solution: The scene perimeters were enlarged by five miles in all directions so the law enforcement could perform their duties without having to wear PPE in the contaminated areas.

Problem: No privacy was provided for patients being decontaminated, and fresh clothes were not available for issue to decontaminated victims.

Solution: Separate decontamination “tents” for males and females were established. Everyone is now issued a Tyvek coverall and a pair of flip-flops after decontamination is completed.

Problem: Medical personnel did not know who was decontaminated and who was not.

Solution: Each decontaminated individual was given a blue wristband to wear, then sent to the medical tent for further treatment.

Problem: Hospitals did not know how many MARK I kits the patients had received before arriving at the hospital.

Solution: Different colored wristbands were issued corresponding to the number of MARK I kits that the patient had received. All agencies are now familiar and utilize the same tagging systems.

MR. LLOYD BAKER

Mr. Baker presented an overview of his CSEPP community’s views on decontaminants, how efficient they are, and the potential adverse health effects associated with the use of such decontaminants. He described how the Deseret Chemical Depot is located in a remote valley, away from population centers. The fence surrounding the perimeter of the depot has added an extra one to two miles onto the existing chemical storage and demilitarization facility perimeter.

Mr. Baker's state uses a three-tiered approach to decontamination. Decontamination can be completed near the depot chemical demilitarization facility, at any of the triage/screening areas in Salt Lake City, Utah, or at any of the ten CSEPP hospitals located within a 50-mile radius of the facility. Field decontamination usually occurs at any of the five traffic control points within five to seven miles from the depot. At each tier, triage, decontamination, treatment, and transport can be completed, if necessary. The field site is staffed by volunteer and paid firefighters (who provide decontamination), sheriff and highway patrol officers (who provide security), and ambulance personnel (who provide treatment and transport). The triage areas also have counselors on hand for psychosomatic patients. Information regarding decontamination is disseminated by a public address system with sirens, tone alert radios, emergency broadcast on radio stations, and from the joint information center. Utah’s poison control center also provides the public with medical information, while consulting with health practitioners for more detailed information regarding patients. At the CSEPP hospitals, some area HAZMAT teams assist with the decontamination. Mr. Baker stated that a CSEPP event may be less likely to occur than a terrorist attack with a chemical agent.

Responding to a terrorist chemical attack would require many of the same knowledge and assets already possessed by the CSEPP community. Most terrorist attacks happen at populated, large-scale functions and events. Utah is hosting the upcoming 2002 Winter Olympics and, if needed, the CSEPP community response will be utilized.

Problem: A large number of people need to be decontaminated with water. This provides a logistical challenge in the desert and produces hypothermic injuries in winter climates. It is also time consuming.

Solution: Use tents to protect from environmental factors; if only a vapor exposure, dry decontamination can be utilized by physically removing clothing and providing alternative clothing. If time allows, shampoo the patient's hair.

Mr. Baker continued by listing the benefits of "dry decontamination."

1. It can be initiated by first responders.
2. There is no need to wait for elaborate equipment.
3. It allows decontamination of more personnel, more quickly than "wet decontamination."
4. It removes 99.0% of contamination.
5. It provides effective treatment for larger numbers of patients in a shorter time.

Some lessons learned from past exercises in the Utah CSEPP community include:

1. Do not use bleach for skin decontamination.
2. Do not use medical or security personnel to operate the decontamination line.
3. Use fire department personnel for operating the decontamination line, whenever possible.
4. Use the local poison control center to provide "telephone triage" to the public.
5. Use colored wristbands to indicate patient's status.
6. Swimming pools work for mass decontamination of liquid-contaminated patients.
7. Consider the climate.

QUESTION: How do we determine when deconned patients are really clean?

ANSWER: By the amount of time they spent being decontaminated.

QUESTION: How and where will you dispose of the spent decon solution and contaminated clothing?

ANSWER: This needs to be examined.

COLONEL GARY HURST – (SUBJECT MATTER EXPERT (SME))

After the two presentations, COL Hurst commented on the subject matter and the materials involved in decontamination. In his reflection of the briefings, he offered no criticisms, and approved of the approaches outlined by the two speakers. He stated that they were all the same principle. He agreed with the idea of not using bleach on an open wound unless diluted to a 0.5% concentration. He also described other methods of decontamination that were successful and unsuccessful. Overall, he reinforced the two theories that the previous presenters offered on the decontamination issue.

QUESTION: Does full strength bleach enhance the skin absorption of mustard or blister agents?

ANSWER: Yes, it does. Copious amounts of soap and water would be preferred.

QUESTION: What do you decontaminate wounds with?

ANSWER: Wounds should be flushed with surgical solutions. It should be a “no touch” technique of lifting out the agent from the wound. If bleach is absolutely necessary, the diluted concentration of 0.5% can be used.

11. TRIAGE PROTOCOLS

DR. RICHARD ALCORTA AND MR. JAMES CODY (CO)

This presentation was a combined effort of the two presenters. They began by stating the three primary objectives for triage during a disaster response, which are as follows:

1. Do the greatest number of good for the greatest number of victims.
2. Effectively utilize personnel, equipment and health facilities.
3. Do not relocate a disaster from one location to another by poor planning or training.

They proposed that in conventional events, the triage officer should be the most experienced healthcare provider. In a chemical event, the triage officer should be the most experienced healthcare provider who is trained to use PPE. Additionally, they suggested five concepts the triage officer must be familiar with in order to conduct a good triage operation:

1. Clinical presentation and progression of illness/injury.
2. Treatment to save life and limb.
3. Concepts and terms associated with triage.
4. Decontamination priorities.
5. Evacuation priorities.

The triage officer should assign responsibilities for communications and record keeping to another responder capable of the task. While triaging, the officer must remain updated on the number and type of casualties, capabilities of the emergency responders, availability of medical supplies, availability of evacuation assets, patient census of area healthcare facilities, and medical treatment facility availability to receive casualties. The triage officer must be sensitive to the factors affecting individual prognosis, such as age, general health, physical condition and chemical agent characteristics. The triage officer accomplish all of this while remembering to protect himself or herself and separating decontamination priorities from treatment priorities. The patients will be triaged several times during the process. The first screening will be completed in the field by the EMT or paramedic and again in the treatment/transport area. Another triage will occur upon entering the medical treatment facility. The Simple Triage And Rapid Treatment/Transport (START) system is the one currently used by Maryland and Colorado.

There are two categories of triage to be completed: Medical Treatment Triage and Medical Evacuation Triage. The definitions are as follows:

MEDICAL TREATMENT TRIAGE

Immediate: Casualty presenting with life-threatening injuries that require procedures of moderately short duration.

Delayed: Casualty able to tolerate delay in treatment without unduly compromising the outcome.

Minimal: Casualty with minor injuries requiring first-aid or self-aid.

Expectant: Casualty with wounds so severe, survival is unlikely with available resources.

MEDICAL EVACUATION TRIAGE

Urgent: Evacuation required as soon as possible, usually within two hours.

Priority: Evacuation required within four hours because of possible deterioration of patient condition.

Routine: Evacuation required within 24 hours for additional care.

Two special considerations include the suspected agents to be encountered and the unique problems associated with chemical agents. Chemical agents can produce latent periods, decontamination needs, psychological effects, and combined insults. The presenters stressed that treatment for psychogenic patients should be included, or the entire triage operation could be impeded.

Survey Comment: Discuss triage guidelines and protocols for rapid acute field assessment.

Response: The presentation addressed this specific request. The audience agreed that the START system should be used to achieve this goal.

Audience Comment: “We need to look at if we are actually *over-triaging* these patients. Perhaps that is something to improve.”

QUESTION: Who is the customer for the CSEPP Program?

ANSWER: “Not the government, not FEMA, not SBCCOM, not the responders, but the patients involved in the event. They are the customers and providing them the care they need in the appropriate amount of time is our goal.” [After answering the above question, Dr. Alcorta continued by using the FOCUS PDCA concept to demonstrate his answer. He described how Maryland’s triage system was improved by using the START system, ultimately benefiting the patients involved.]

QUESTION: Are there some ideas to move forward with, to start the process of determining a best practice?

ANSWER: Everyone here feels very comfortable about START triage being a best practice. The presentation given by Mr. Cody and Dr. Alcorta has measured every step of the process and proved it is the best practice.

QUESTION: Where is it written that decontamination should be 20 minutes in length?

ANSWER: It is not written anywhere; it was derived through experience. The usual time frame to process a litter patient through a decontamination line is 15-20 minutes.

QUESTION: Is this a best practice?

ANSWER: No, it is not a best practice.

Survey Comment: A system or method should be used to identify clean and/or medicated patients.

Audience Response: We have discussed the tagging of a patient with a wristband in decontamination. Now let's discuss medicating the patients. A basic EMT should be on the hot side of the decontamination line to perform initial START triage, and determine who should be deconned first. Re-triage should occur after the patient arrives at the cold side of the decontamination line, by a paramedic. At this time, further treatment options can be considered. Do not place an Advanced Cardiac Life Support capable person in PPE in the hot zone.

Audience Comment: We should develop a medical IPT to further develop best practices.

Audience Response: Conference attendees can suggest this course of action to FEMA representatives.

QUESTION: Are there any legal issues for those people who will be working outside their normal scope of practice as the triage officer?

ANSWER: "In any event where the EMS responders are in the field, there are different levels of providers. The incident commander will know whom to assign as the triage officer. He or she will be confident in whom they assign to do triage. In the hospital environment, yes, every emergency department has a triage nurse. Will that person be subject to wearing PPE and sent outside the facility to determine who should come in? That is an independent decision to be made by the ED supervisor. Should it be a nonmedical person doing triage? That is a very legitimate question that can only be answered at the local level. You should look at a scope of practice for the individual who is doing triage. We should leave that up to you to decide based on your institutional preparedness and your plans."

Survey Comment: Discuss the handling and treatment of psychogenic patients, because they have the potential of clogging the system, particularly if they must be decontaminated. Discuss methodologies that can be considered to ease the burden and potential congestion caused by these patients.

Audience Response: There are facilities set up to collect these patients. We distribute a fact sheet for these patients to review which tells them what signs and symptoms to look for before calling a facility. For example, call us if you have a sunburn type injury following the event. Acknowledging their anxiety is the single most important thing we can do. Also, do not overlook the psychological impact that this is going to have on the people delivering the care.

Audience Response: We get our mental health people involved in the emergency response team. They are also dispatched to the scene. They are able to keep an eye on our own providers' mental health at the scene. We give the psychological patients a card that basically says if you have any more concerns, you can call this number to discuss them. The person's name is taken so they can be tracked, if needed. The mental health providers are also on scene to provide more in-depth care.

Audience Response: In Maryland, we have the Critical Incident Stress Management Team debrief the responders right after the event, to defuse any possible psychogenic problems immediately. The public debriefing is another concern. A system has to consider the local psychiatric society and site social workers to help the health department with this issue. They will need to work together.

Audience Response: Use your local poison control system to answer the questions these patients may have. It will reduce the burden the emergency rooms may have. There is a web site to refer to for more information: <http://www.aapcc.org/>. Also, the 911 dispatchers can telephone-triage these patients and refer them to the poison control center.

Audience Comment: SBCCOM has a telephone number to contact if there are any chemically-related questions. For non-emergencies, call 1-800-368-6498. The hot line can be reached at 1-800-424-8802.

12. TOXICOLOGICAL TREATMENT

DR. MICHAEL PROCTOR (AL) AND MR. MIKE PARETTE (AR)

Both presenters discussed the treatment protocols that their systems use for patients. Dr. Proctor offered comments on alternative medications to current U.S. Army recommendations.

1. Atrovent: It is similar to atropine, and is currently used for asthma and COPD-type medical problems. It can be inhaled orally or nasally instead of being injected, as in the case of atropine. Fifty percent of the absorbed drug is excreted unchanged in the urine.
2. Versed: It is an alternative to diazepam, and is currently used for intravenous sedation, anxiolysis, and to induce amnesia during minor surgeries. It is short-acting, and is common in most emergency rooms. It is not yet FDA-approved for use in status epilepticus.

3. Ativan: It lasts longer than diazepam (42 hours in neonates, 10.5 hours in children, and 13 hours in adults). It is currently indicated for sedation, induction, anxiolysis, alcohol withdrawal, and status epilepticus. Routes of administration include oral, intravenous, and intramuscular.

Both presenters commented on the need for pediatric autoinjectors (MARK I kits). After they described the medications and dosages to be administered, Dr. John Urbanetti (SME) gave a brief history and background on each of the medications. He provided documentation regarding overdose of atropine in children, as well as a descriptive view of how atropine affects the human body. He stated that diazepam has disappeared from most neurology treatment protocols; however, he advised healthcare providers not to substitute phenobarbital or Dilantin for diazepam during seizure activity following a nerve agent exposure. He suggested first trying atropine and oxygenation, then moving onto diazepam.

QUESTION: Do women react differently to nerve agent antidote?

ANSWER: No, that is a falsehood. Antidote effects depend upon the dosage administered to the patient in relation to the patient's weight, metabolism, and rate of absorption.

Audience Comment: Age derivative protocols for pediatrics should be developed.

Audience Comment: Ativan requires refrigeration to maintain its stability.

Audience Comment: We all agree that using treatment algorithms, such as those from the 1996 Atlanta Olympic Games, would be the best practice to follow. Currently, four of the CSEPP states follow these types of protocols.

Audience Comment: If this were ever to become public, that we do not have the tools to immediately treat pediatric patients, the public outcry may bring this about quite rapidly. There is data from Israel on pediatric atropine studies, so it cannot be said that data doesn't exist.

13. ADMINISTRATIVE SUPPORT AND STAKEHOLDERS

MS. DEBBIE KIM (UT) AND MR. DENNIS HUDSON (AR)

MS. DEBBIE KIM

Ms. Kim gave a brief review of the program growth at the University of Utah Hospital and the responsibilities of hospital emergency management personnel. She stated that the University of Utah Hospital identified their hazardous material program as having an “all hazards approach” to all incidents. The program had to be ready to respond to a number of possible identified events. Currently, the hospital emergency management program is preparing to deal with WMD and other emergent public health threats, intentional acts of disruption from inside and outside of the facility, enhanced hospital security, internal hazardous material management capabilities, program management, and data tracking. These present new challenges to the hospital administration in a time of revenue shortfall, reductions in force, large staffing turnover rates, costly participation in CSEPP exercises, budget constraints, and new hospital construction. In order to get the hospital administration to participate in the CSEPP program, she had to convince them that it adds value to the institution.

She concluded by saying that patients with HAZMAT exposures are a threat to hospital operations, and that personnel and hospitals must be prepared to deal with these exposures when an incident occurs. After a few exercises at a facility, it became evident that a breakdown in communication is the single most important threat to the hospital environment. Training is expensive and time consuming, and new technology must be used to reduce costs. All training should be shared so that every department knows the correct procedures during these events.

MR. DENNIS HUDSON

Mr. Hudson presented the perspective of a much smaller community hospital. Although his is a small hospital, it faces many of the same problems of the bigger facilities. He named the top ten weaknesses in most hospital emergency preparedness programs:

1. Hospital has not undergone a detailed review with the local agencies.
2. Hospital lacks logistical tracking to identify critical low supply levels.
3. Hospital has no way to troubleshoot problems.
4. There is poor documentation of events.
5. Hospital does not consider enough scenarios.
6. There is no adaptable form for managing information.
7. There is lack of multidisciplinary input.
8. Communication issues are not addressed broadly or even in detail.
9. Programs are not flexible.
10. Programs lack critical information.

Mr. Hudson continued by describing competition, competency, and cost as obstacles to the hospital's participating in the community emergency preparedness plans. He concluded by giving his suggestions for best practices:

1. Build disaster response around daily functions.
2. Use tabletop exercises to prepare the staff.
3. Use standing orders, the HEICS job action sheets, or "how to" posters to help the staff.
4. Obtain administrative buy-in to ensure success for the program.

Ms. Wilcoxson (SME) tied the two presentations together by reviewing the challenges of the hospital administration, and suggested the following as possible “best practices” that she interpreted from the presentations:

1. Integrate the hospital staff responders and emergency management coordinators.
2. Coordinate and educate the heads of each agency/department on CSEPP.
3. Convince/motivate hospital administration that CSEPP is valuable to the institution by showing it adds good public relations, reduces overall costs, uses high technology, and prepares the hospital staff for any type of mass casualty event, not just chemical.

14. CONCLUDING REMARKS

MS. LISA HAMMOND AND LTC(P) DAVID MUKAI

MS. LISA HAMMOND

Ms. Hammond asked if there were any issues from the group to be raised to the exercise-training group, the planning group, or the public affairs group. The response was to ask for a “medical IPT.” She then proceeded to ask if there was any opposition to a national medical IPT; there was none. She said that the acronym (IPT) stands for integrated process team. It is a group of individuals representing all the stakeholders involved in CSEPP. Ms. Hammond stated that participants would work on issues regarding CSEPP or deriving best practices and performance measures. On a separate topic, Ms. Hammond stated that if there are any medical training or exercise support needs for FY01, they need to be turned into the health department medical coordinator. She noted that the health department coordinator will submit the request to the state emergency management agency. They will work those issues into the FEMA regions. Ms. Hammond asked that people please follow the protocols in doing so. Also offered for distribution was the revised edition of Policy Paper #15, Off-Post Medical Preparedness Capabilities, April 2000.

Ms. Hammond then polled the group about meeting during the year. The group decided that they would like to hold an annual meeting with the National Conference, plus one additional meeting. She then thanked participants on behalf of FEMA.

LTC(P) DAVID MUKAI

LTC Mukai thanked the participants for attending and participating in the conference. He also offered thanks to the facilitators, subject matter experts, Mr. Kenneth Hudson and Mr. Paul

Roberts. He again expressed his gratitude to the audience and stated he was looking forward to having another conference like this sometime in the future.